



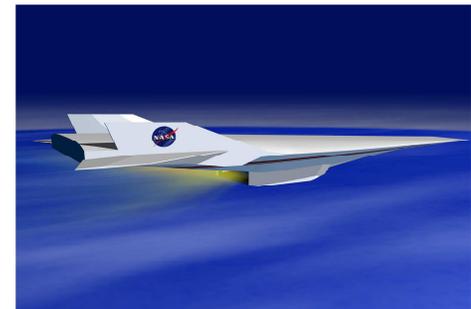
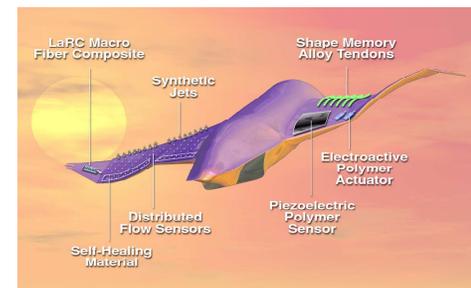
Full Cost Operations

Accounting, Budgeting, and Management

The Full Cost Guide for LaRC

“I think it an object of great importance...To simplify our system of finance...the whole system [has been] involved in impenetrable fog...we might hope to see the finances of the Union as clear and intelligible as a merchant’s books, so that every member of Congress, and every man of any mind in the Union, should be able to comprehend them to investigate abuses, and consequently to control them.”

Thomas Jefferson,
April 1802



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I. Overview

Executive Summary

The full cost initiative is designed to enhance cost-effective mission performance by modifying the way NASA does business so that managers are provided with better information to support decision-making. In its simplest terms, the full cost initiative ties all costs (including civil service personnel costs) to programs/projects. Under full cost, there are no “free” resources. All resources are associated with benefiting programs/projects. The premise of programs/projects funding and using all costs in the Agency changes various elements of the budgeting, accounting, and management processes to accommodate full cost. NASA implemented the full cost initiative on October 1, 2003 for the Fiscal Year (FY) 2004 Budget.

Objective

NASA’s full cost initiative is designed to improve the way NASA achieves its mission by implementing new, improved management, budgeting, and accounting policies, practices, and procedures. These new full cost practices are designed to provide timely, accurate estimates and actual cost information on the services and support activities required to achieve cost efficient administrative and program mission performance. The use of full cost management, budgeting, and accounting does not, in and of itself, change the institution/infrastructure; rather, it more clearly discloses infrastructure costs, and their relationship to projects, while facilitating the decision-making process.

Overview

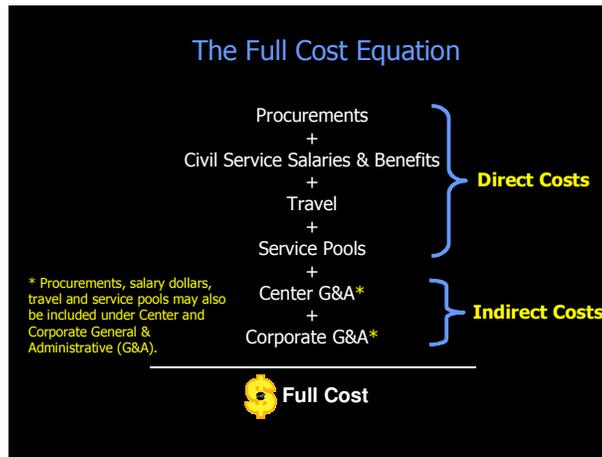
The full cost concept ties all Agency costs (including civil service personnel costs) to major activities. These major activities, or final cost objects, within NASA are Agency programs/projects. As previously mentioned, there are no “free” resources; all costs are assigned to benefiting programs/projects. NASA plans to manage, budget, and account for costs on a project basis. NASA is continuing to refine the anticipated activities that will be considered “projects” for full cost budgeting, management, and accounting purposes. Approximately 50 LaRC activities have been identified as full cost projects in the FY 2004 NASA budget request. Examples of LaRC full cost projects include the Twenty-first Century Aircraft Technology (TCAT) project within the Vehicle System Technology Program and the Vehicle Safety Technology project within the Aviation Safety Program. In contrast to the old approach in which civil service personnel costs and certain other costs of an infrastructure/institutional nature are not tied to projects, under the full cost approach all costs are associated with projects.

Agency Benefits of Full Cost

- Full cost practices will help lead to a more efficient, optimal use of institutional resources. Institutional resources are justified based on project requirements (directly or indirectly).
 - With No “free” resources, program/project managers have more insight and a more critical role in defining institutional capabilities.
 - A better linkage between services and customers and the integration of civil service labor cost exists; funding for service pools is allocated based on demand/consumption rather than a parametric formula used with old program support account; civil service workforce is allocated based on specified need.
 - Increased attention on G&A infrastructure and sources of support capabilities by managers at all levels (Center, Enterprise, and program); should help reduce underutilized institutional capabilities and find more cost effective alternatives.
 - Increases ability for competitive selection of support capabilities
- Supports economic decisions for appropriate resource allocations, and the bench-marking of NASA service activities with other similar services; also provides a more comparable means for evaluating government vs. contractor options leading to minimization of government-held infrastructure.
- Strengthens ties between NASA’s missions, programs/projects, and budget requests; helps justify NASA’s budget on a program/project basis.
 - Provides an effective tool for program/project managers to better manage, and motivates managers to operate efficiently.

Cost Categories

NASA categorizes costs in two major ways: direct and indirect. The following equation demonstrates how full cost is calculated considering the major cost elements.



Elements of cost definitions:

Direct costs: those costs that are physically identifiable to projects at the time they are incurred or can be assigned back to projects based on usage/consumption. These costs are subject to the control and/or influence of the project manager. Direct costs elements include procurements, direct civil service salaries/benefits, direct travel, and service pools.

Indirect costs: those costs that are not physically identifiable to projects and cannot be assigned back to projects based on usage/consumption. These costs are not subject to the project manager’s control but may be influenced. Indirect costs elements include Center General and Administrative (G&A) costs and Corporate G&A costs.

Procurements: consists of purchases such as hardware, contractor labor, and equipment

Personnel: salaries/benefits costs for civil service personnel

Travel: travel costs for civil service personnel

Service Pools: covers a broad range of institutional/infrastructure capabilities that support multiple programs/projects at a center. These costs can be traced/linked to a given project based on usage/consumption. The standard Agency service pools include Facilities and Related services, Information Technology services, Fabrication services, Science and Engineering services, Test services and Wind Tunnel services. Service pools may include procurements, civil service salaries/benefits, and travel.

Center G&A: consists of Center costs that cannot be related or traced to a specific project, but benefit all activities. These cost include such elements as: fire protection, security, Center Management, and Logistics. Center G&A may include procurements, civil service salaries/benefits, travel, and service pools.

Corporate G&A costs: consists of costs that are related to the business operations of NASA Headquarters as a center and Agency level functions that are G&A in nature performed at a Center (for example, IFMP). This includes costs for: the NASA Administrator and immediate staff; the Enterprise level/management; Headquarters Operations management; and Functional management, including Safety and Mission Assurance (SMA). Corporate G&A may include procurements, civil service salaries/benefits, travel, service pools, and Center G&A.

II. Full cost budgeting and accounting changes

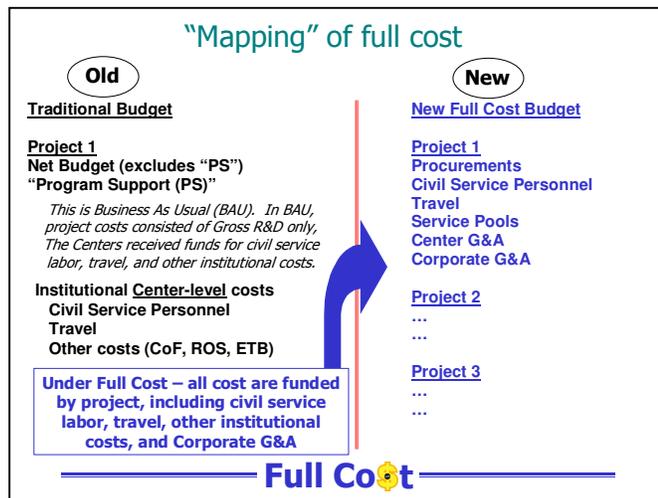
Federal Mandate

The Federal Financial Management Improvement Act of 1996 mandated full cost practices for all Federal agencies. The law stated: “The purposes of this Act are to...require Federal financial management systems to support full disclosure of Federal financial data, including the full costs of Federal programs and activities, to the citizens, the Congress, and President, and agency management, so that programs and activities can be considered based on their full costs and merits...”

Funding and the Appropriation Structure

The appropriation structure of the Agency provides the legal framework/authority to budget, expend, and account for the funding authorized to the Agency by Congress. Over the past few years, the appropriation structure in the Agency has been changing to support the implementation of full cost practices. Specifically, NASA moved to two appropriations in FY 2003; the Science, Aeronautics and Technology (SAT) and Human Space Flight (HSF), while eliminating the mission support appropriation, which funded salaries/benefits, travel, research operations support, and construction of facilities. (NASA plans to continue to obtain a separate small appropriation for the independent NASA Office of Inspector General activities.) However, even with the elimination of the mission support appropriation, budgets for salaries, travel and other items continued to be separately identified and accounted for outside of the program/project budgets.

Starting with the FY 2004 full cost budget submit, all institutional costs are budgeted at a much lower level, at the NASA program/project activity level. The Agency’s direct workforce and related costs are directly matched to programs being worked. In the case of indirect civil service labor, these costs are initially captured in G&A and service pool accounts, and are subsequently assigned to programs based on actual service consumption or a G&A approved distribution basis. Therefore, at the NASA program/project level, under full cost, the budget for the program/projects increased since all costs are now captured under the program/project budget. The target for applying full cost is typically at the project level (usually at Level 3 in the budget structure and at Level 4 for projects in formulation or less than \$100M). There are two exceptions to the noted full cost level. The first exception is for Space Station where full cost has thus far been applied primarily at the theme level (referred to as Level 2). The other exception is for Environmental Compliance under Space & Flight Support, where the activities themselves are not directly full costed since the NASA personnel who conduct these activities are considered part of the Center and Headquarters general and administrative (G&A) cost pools. In addition, in FY 2004 NASA implemented a new appropriation structure based on the theme-based budget concept. The current NASA appropriations (excluding the Inspector General) are Space Flight Capabilities (SFC) and Science, Aeronautics, and Exploration (SAE).



Under full cost, NASA classifies cost in six basic groupings. In that regard, each project budget shows the budgeted costs of ¹procurements, ²personnel, ³travel, ⁴service pools, ⁵center G&A, and ⁶corporate G&A. The cost classification for projects is very different from previously discussed budgets. Centers have always had to manage the total institution/infrastructure, personnel, and travel costs. However, prior to full cost, project managers typically were not advised of such institutional cost elements.

Cost classification

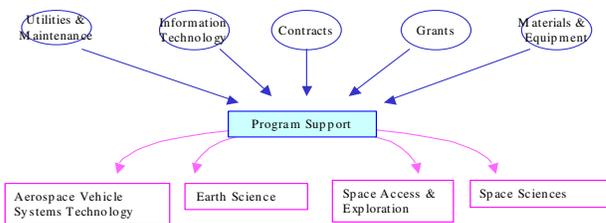
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Elimination of Program Support

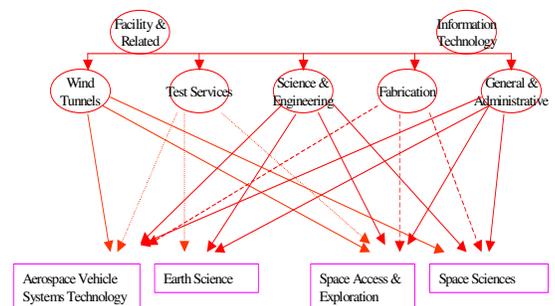
Pursuant to the ongoing evolution of LaRC full cost practices, the old “Program Support” terminology and practices have been changed to more accurately reflect full cost business concepts and practices. Such practice changes are required to help ensure NASA LaRC’s future as one of the Nation’s premier aerospace research and development (R&D) organizations. Affordable, consumption-based, cost efficient services to customers are replacing the old perceived paradigm of Program Support “taxes”. Consequently, the new terms service activities and G&A are being used as a more accurate description of full cost practices.

Under the old “program support” approach, programs/projects paid for institutional/infrastructure support based on estimated civil service workforce, not consumption or usage. As a consequence, some people perceived program support as a general tax on gross R&D funds/workforce. The new “service activity and G&A” practices follow full cost principles, and are designed to ensure that services are established based on customer requirements and that such customers pay for the services they consume. The following diagrams highlight the Center’s old and new approaches to support/services.

Program Support (Old)



Service Activities and G&A (New)



The key differences between the two approaches are the linkage between the services and the customers and the integration of civil service labor costs. In the “old” program support approach, no clearly identifiable link existed between the support being provided, such as utilities, materials and equipment, and the customer. Programs/projects paid for support costs as a lump sum based on estimated workforce use whether they used the specific support or not. In contrast, in the “new” full cost approach a clear link is established between the service provider and the customer. Program customer’s pay for service activity costs, including civil service labor costs, based on estimated/actual usage or consumption of specific services and receives an allocation of G&A support based on total direct workforce.

Supporting systems

The Integrated Financial Management Program (IFMP) is a large, complex information technology initiative that is changing the way NASA manages financial and business processes. IFMP replaces unique Center and Enterprise systems and approaches financial management with a set of standard integrated business applications for staffing and recruiting, travel requests and authorization, human resources, budget formulation, procurement and asset management, and more. IFMP is being implemented NASA-wide and will support full cost operations, consisting of the following major business-process modules:

- Resume Management*
- Travel Management*
- WebTADS (WebTADS is a NASA standard system not part of IFMP)*
- Position Description Management*
- Core Financial*
- Budget Formulation*
- Human Resources*
- Integrated Asset Management*
- Procurement*

III. Services

Center Services

Agency service pools cover a broad range of institutional/infrastructure capabilities that support multiple programs/projects at a center. These costs can be traced/linked to a given project based on usage/consumption. The Agency has defined six standard service pools, each with its own name and basis of cost assignment back to customers. The standard service pools consist of facility services, information technology services, fabrication services, test services, science and engineering services and wind tunnel services. Sometimes service pools may also be referred to as service activities or Center services. Some services may direct charge elements of costs to project customers by cited the project account structure on the purchase request. Generally, at LaRC, we refer to the entire service (direct + pool) as an activity. The pool portion of the service represents the amount assigned back monthly using the cost assessment process, while the direct charge element represents any costs charged directly to the project WBS accounts. All service pool costs are assigned back to customers monthly using cost assessments. Cost assessments are discussed in the following section of this document.

The following is a list of Service Activities at Langley and the basis for cost assignment for each:

Service Pool	Basis for Consumption
Facilities Service Pool	Square Footage
Information Technology Service Pool	By cost driver (direct labor hours, seats or workstations, lines or CPUs for telecom)
Science and Engineering Service Pool	Direct labor hours
Fabrication Service Pool	Direct labor hours
Test Service Pool	Direct labor hours
Wind Tunnel Service Pool	Operating shifts

Cost Assessments

Cost Assessments represent a posting of cost from pools and/or G&A accounts based on a defined basis of assignment to provide the full cost of Agency programs/projects. Under full cost, monthly cost assessments will be made to project customers for civil service leave and fringe benefits, service pools, Center G&A, and Corporate G&A. Cost Assessments enable the distribution of operational/indirect costs back to customers in an efficient manner.

Preferred Order of Cost Assessment Method Types

1. Actual price and actual consumption
2. Actual cost and actual consumption
3. Planned cost (standard rate) and actual consumption
4. Planned cost (standard rate) and planned consumption

However, as we transition to full cost, Centers may choose to start cost assessments based on planned cost and consumption. As Centers attain knowledge and experience with performing cost assessments they should progress towards actual costs and actual consumption

LaRC Cost Assessments

The following information displays the current cost assessment methodologies for Center services. Please note, as full cost practices are refined the cost assessment methodologies may be changed.

<u>Service/Activity</u>	<u>Assessment method</u>
Facility Services	Planned cost and planned consumption
Information Technology	Planned cost and planned consumption
Science and Engineering	Planned cost and actual consumption
Fabrication	Planned cost and actual consumption
Test Services	Planned cost and planned consumption
Wind Tunnel Services	Planned cost and planned consumption
Center G&A	Planned cost and actual consumption

The cost assessment process occurs on a monthly basis and is designed to provide more accurate cost information for service customers. In that regard, service manages and the OCFO will continuously monitor service costs and rates to ensure optimal charges are being assessed to customers. In addition, the Center plans to update the service bills prior to the beginning of the fiscal year and at mid-year to reflect changes in planned versus actual service usage.

IV. General and Administrative (G&A)

General & Administrative (G&A) Costs

G&A represents those costs that cannot be obviously or physically identified, traced or linked to a specific project but benefit all projects/activities and are allocated to a project based on a reasonable and consistent basis. The Agency has adopted two different types of G&A costs and two different methodologies for allocating these costs. Corporate G&A will be allocated to programs/projects based on direct costs, while Center G&A will be allocated to programs/projects based on onsite direct workforce.

Center G&A Costs

This cost category captures center costs that cannot be related or traced to a specific project, but benefit all activities. These costs are allocated to center programs/projects based on the number of direct civil servants (including direct service pool workforce) and on-site direct contractors that work a given project. This method of cost allocation (cost per FTE (full time equivalent)) is considered to provide an appropriate indication of the amount of general institutional/infrastructure that is driven (consumed) by a project activity at a Center.

The following standard types of costs/functions are included in each center's G&A account: G&A civil service salaries/benefits/travel; center training and awards; security; grounds maintenance; pavement/roads; fire protection; library; business computing; public affairs; non-program construction of facilities (CoF); transportation services; legal; human resources support services; procurement support; budgeting; accounting; equal opportunity; educational outreach; medical services; and logistics services.

During the budget formulation process, the Center Director determines the appropriate funding levels for G&A functions for the upcoming fiscal year, consistent with Agency guidance and with the approval of Enterprises. The total Center G&A is then spread back against center projects, and is included in the projects full cost budgets.

Center G&A rate = Total G&A Cost/Total Onsite Direct Workforce Equivalents

Corporate G&A Costs

This cost category consists of costs that are related to the business operations of NASA Headquarters as a center and Agency level functions that are G&A in nature. This includes costs for: the NASA Administrator and immediate staff; the Enterprise level/management; Headquarters Operations management; and Functional management, including Safety and Mission Assurance (SMA). Costs for Corporate G&A functions performed for the Agency at NASA centers are also included. Some of these activities performed at Centers on behalf of the Agency were previously budgeted as part of the Center's institutional budget and have now been transferred to the Corporate G&A budget. For the FY 2004 NASA Budget, Corporate G&A costs are allocated to agency programs/projects based on the program's share of NASA's total direct cost (budget authority) including service pools. Corporate G&A is spread at the Agency project level only, and does not get spread to Center projects.

Corporate G&A rate = Total Corporate G&A Cost/Total Agency Budget Authority (excl. G&A)

V. Workforce

Defining Workforce

Various types of workforce exist at LaRC. The Center workforce consists of full and part-time civil service personnel, students and interns, on-site contractors, other government agencies, and university personnel. The workforce at LaRC is responsible for the world-class research results that are produced on an annual basis. While projects have various agreements with organizations outside the gates of the Center, we will be focusing on the workforce located within the confines of the Center.

Workforce Complements

The civil service workforce complement is the amount of civil service employees the Center is able to maintain as approved by NASA headquarters. The Centers Complement Management process LMS CP-4310 describes the process for establishing and maintaining organizational complements. It is the responsibility of the Office of Human Resources (OHR) to ensure that this process is followed and the results of this process are documented in the Center's complement allocation system, which will serve as the single source for all organization unit complements down to the 2-digit organizational code level, such as the OCFO. The Agency has eliminated the full time equivalent (FTE) cap and retained the full time permanent (FTP) cap for civil service personnel. However, to maintain effective workforce planning, LaRC plans to manage both FTE's and FTP's. In that regard, Center management plans to distribute approved FTP complements and FTE complements for the execution year by October 1 or shortly thereafter.

Workforce Planning and Actuals

Workforce planning is conducted during the budget formulation process using existing systems. The workforce planning process is an integral part of the budget process. Civil service workforce actuals are collected by project WBS using WebTADS. The WebTADS information is approved and certified by supervisors and processed through the labor distribution process. The labor distribution process maps the actual charges and costs into IFMP Core Financial (CF) and stores the data in the Business Warehouse (BW). For reporting purposes all workforce (WF) charges (hours, Full Time Equivalents) by program/project WBS, G&A, or Service Pool should be extracted via reports from BW and compared against the plan established in the IFM Module for Budget Formulation.

All official budget and actual resource information comes from the IFM Systems and BW reports. However, for management purposes, more detailed information on actual WF charges may be found in the Automated Workforce Actuals Reporting (AWARE) System that is also available within the LaRC Workforce Integrated Management System (WIMS). AWARE uses the same Labor charges and FTE calculations to display more detailed WF actual charges by organization or by project WBS. Detailed workforce allocation plans by organization by project are available in the Workforce Planning System (WPS) within WIMS, which is used to feed the Budget Formulation part of the Program Operating Plan (POP) process.

Civil Service Labor Charging

Accurate time and attendance data at the Center has always been emphasized as an important element for tracking time worked on daily activities, and for planning future activities. In addition, moving towards more accurate workforce charging at the Center has been a priority for the last several years. Now that we are operating under full cost principles within the Agency, it is even more critical to have accurate labor charging to achieve the optimum efficiency and insight into program/project planning and execution. In the full cost environment, implications of inaccurate workforce charging are significant since civil service salaries and benefits are budgeted and paid for by programs/projects. Inaccurate time and attendance may lead to lack of complete data for decision-making, impact program/project budgets, and cause complications in the funding of salaries/benefits at the Center-level.

Employees are responsible for accurately charging their time to the proper labor charging code; however, it is the Supervisor's responsibility to communicate the correct project work-break-down structure (WBS) account to each employee based on workforce plans. If your time is spent directly working on the accomplishment of program/project milestones, you should charge directly to the Project WBS; all other

time (physicals, colloquiums, and other non-Business Management functions) should be charged to the appropriate business-related (General & Administrative – G&A) Project WBS.

Employees working on prior year programs/projects (e.g. close-out activities) with no current year funding available, should contact their supervisor and/or the appropriate Program/Project Office to determine the valid current-year Project WBS in which to charge labor hours.

The programs/projects have the responsibility of reviewing workforce reports and communicating inaccurate charges to employees and their supervisors. Employees and supervisors must be responsive in making the changes to the correct labor charging code. In the new integrated Agency financial systems, there is a 3 pay-period limitation for making corrections. If the changes are not made during that time, they may not be subsequently corrected.

Consistent with current labor charging practice, labor is to be charged/tracked to specific work activities and may be charged at the lowest increment possible (down to 15-minute increments).

VI. Budget formulation/planning

Overview of Full Cost Planning

NASA continues to be mission-driven in accordance with the Agency mission and vision. NASA accomplishes mission objectives through the implementation of programs/projects. In that regard, the Agency has an established budget planning process to formulate the Agency full cost budget for the next five years. To manage a successful full cost project, a project manager should understand the integrated set of institutional services, workforce, partnerships, and cooperative agreements required to achieve the milestone objectives. In that regard, full cost planning incorporates several fundamental elements of change. Under full cost, Agency projects must budget and pay for all resources being consumed, including procurements, civil service personnel, travel, service pools, and G&A. The budget planning process provides an opportunity to plan all of these elements and to identify problems with out-year requirements or resources.

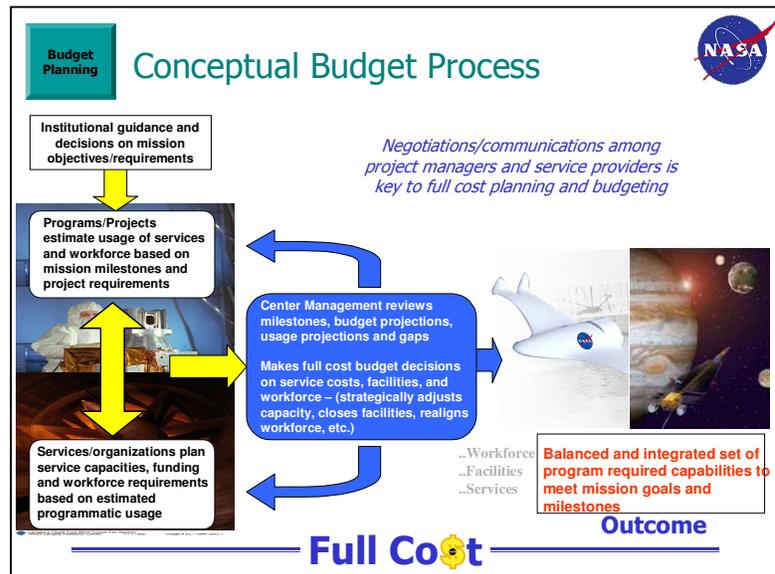
Institutional (Workforce, Facilities, Services) Planning

Full cost practices require early decisions on mission objectives to help plan future skill mix needs, facility requirements, and overall service capabilities. The institutional elements provided at the Center are extremely important to successful project implementation since these resources both provide services and generate costs to project activities. Service activity managers need to estimate customer demand using historical data and known requirements. These managers must also maintain service viability for future operations needed to support future mission objectives. However, since the funding to support service operations is collected through rates, a balance must constantly be maintained to provide efficient, cost-effective operations while continuing to invest in the future of the service to support future mission objectives.

The Planning Process

The budget planning process is an integrated process that requires communication between various Center and Agency parties to be successful. The diagram below highlights the conceptual budget process used to formulate budgets in a full cost environment.

The budget formulation process should begin with Agency guidance on mission objectives and institutional direction. Center managers are then able to integrate Agency direction into the beginning of the budget formulation process. The process then moves to a negotiation phase in which Center project managers communicate milestones requirements and mission objectives to organizational managers and service providers. These groups negotiate skill mixes, workforce distributions, facility usage, and other requirements needed to accomplish mission objectives. All information is then taken forward to Center management for final decisions on budgets, workforce, facilities, and overall Center direction. The outcome of the budget formulation process is to plan for an integrated set of program based required capabilities, including workforce, facilities, and services that is balanced with available resources to accomplish the mission/milestone objectives of the project.



Budget Planning Roles

Various parties are involved in the budget planning process. The following list describes the types of roles to be performed during the budget planning process.

Agency Roles

NASA Administrator

Determines overall Agency direction.

Enterprise AA

Formulates mission/theme objectives and provides overall programmatic direction

Determines Enterprise strategic direction.

Program Managers (HQ)

Provide direction and decision on programmatic milestones and objectives, approve budgets, and performance metrics

Associate Deputy Administrator for Institutions and Asset Management (Code ADI)

Provides guidance for institutional elements

Functional Offices

Develop Agency-wide functional area guidance and objectives

Agency OCFO (Code B)

Functional owner of the budget process.

Resource Analysts (HQ and Center)

Perform resource and financial analysis to support Program/Project Managers, Service Pool Managers, and G&A Managers activities

IPO (Integrated Program Office)

Provides overall guidance to respective centers

Center Roles

Project Managers (Centers)

Execute programmatic milestones and objectives, distribute approved budgets, and achieve performance metrics

Provide requirements to Center organizations and service pools based on milestones/objectives

Review and control the total cost of projects

Service Pool Managers

Develop and maintain service capabilities, budgets, capacities, and rates

Provide cost of services provided to project customers

Center G&A Managers

Develop and maintain organizational capabilities and costs

Develop functional area resource plans and objectives

Line Organization Managers

Develop and maintain organizational capabilities and costs

Develop functional area resource plans and objectives

Chief Financial Office

Overall budget integration, recommends Center cost rates, official budget information

Center Director

Approves Center service pool and G&A rates

Ensures project milestones can be achieved

Maintains overall institutional resources

VII. Budget execution and accounting

Funds Distribution

Funds distribution is the process of allocating budget authority to Center projects to be expended. Full cost practices dictate various changes to the funds distribution process. These changes are especially evident at the Center-level. Funds will continue to be distributed from Headquarters using the Core Financial Module of IFM. Based on Agency design, funds distribution will occur primarily at the 3-5-digit project level. Project fund distributions to the Centers will include all cost objects (excluding corporate G&A). Center personnel will need to segment the project funds into the appropriate cost category prior to expenditure of funds.

Expenditure of Funds

Expenditure of funds is the process of spending funds that have been made available from the funds distribution process. Procurement funds will continue to be spent by writing purchase requests and using credit cards. Salary costs for civil service labor will be accumulated and charged back to projects, service pools and G&A based on actual cost charges accumulated in the labor system. Travel costs will be charged to projects, service pools, and G&A based on funds spent using the Travel Manager system. Service pool and G&A costs will be assigned back to projects using the monthly cost assessment process.

Updates to Funds Distribution Allocations

The original funds distribution process allocating funds to the various cost elements will be based on the budget plan entering the year. However, it is evident that the actual costs will be different than planned costs. In that regard, the Center plans to update the funds distribution allocation to reflect actual usage of workforce and to realign project cost elements. In the past, program offices received bills from the service activities during the budget formulation process based on requirements submitted by the program offices for those services. The service bills were recalculated at least once during the year (usually at mid-year) to reflect major program requirement changes and redistributed to programs.

Due to the complexity of the system, timing, and workload consideration, the planned approach will be to calculate full cost service bills during the budget formulation process and revise the bill for the upcoming year before the start of the fiscal year and at mid-year. However, if significant overall service usage/consumption changes become evident due to programmatic or other Center priority changes, Center Management may recalculate full cost bills as a special process. In order to perform the calculation of service bills consistent with the change in plans, workforce requirements, funding guidelines, milestones, deliverables, and facility needs must be understood, negotiated and agreed upon by sponsoring and implementing organizations.

VIII. Other Full Cost Topics

External business

Pursuant to Agency policy (unless legislatively prohibited or “grandfathered” under previously approved agreements), LaRC plans to recover the full cost of services provided to external organizations. In that regard, all proposals for potential agreements with external organizations must integrate an analysis of the financial impacts of the agreement on LaRC. These financial analyses, which typically are summarized in an Estimated Price Report (EPR) pursuant to Agency guidance, must be reviewed and agreed upon by the LaRC Office of the Chief Financial Officer (OCFO) before an agreement is negotiated and signed with an external organization. The Program Development & Management Office (PDMO) helps support this process by preparing the EPRs for the OCFO to review and approve.

In certain circumstances, LaRC may charge external customers less than full cost to support key Agency and/or Center strategic initiatives. If a LaRC organization proposing an agreement anticipates not recovering all of the costs associated with the agreement from the external organization, pursuant to Agency policy, the LaRC Chief Financial Officer (CFO) must approve such a cost waiver. Such a waiver must be fully justified and documented on the EPR. In that regard, the related financial analysis should specify the anticipated Agency and/or LaRC program/mission benefit from the agreement and specify any relevant financial information, including the estimated financial contributions from external organizations, particularly for agreements that are considered cooperative agreements. In addition, while certain costs may be waived for external organizations in light of project/mission benefits, such costs should be recovered from the benefiting project(s). Such project funding not only pays for the full cost of Center activities, but also helps validate the noted benefits and help ensure that other LaRC projects do not pay for the noted cost waivers through higher service rates.

Travel funding

Prior to FY-04 NASA travel funding was controlled and limited by the appropriation laws. Congress issued the previous limitation on travel funds to NASA. In that regard, NASA received limited travel funding and was responsible for maintaining separate accountability for such funding as fund source 42. These controls were monitored by the OCFO and strictly regulated by law. This fiscal year, the appropriation limitation does not apply because all funds received for FY-04 and subsequent years are summarized in two appropriations without any type of identification (i.e. Payroll, travel and procurement funds). All funds are provided in two appropriations; a) Science, Aeronautics and Exploration (SAE). b) Space Flight Capabilities (SFC) via the project allocations without travel fund limitations.

Programs/projects at the Center should carry out the budget plan for the fiscal year in process, by securing all travel funds planned, and making the necessary distribution of funds to all activities. Programs/projects must manage and evaluate on a monthly basis their travel funds activities. They should verify their established plan vs. actual to control the use of the travel funds. If there is a need for project/program managers to increase travel funds, allocations of funds should be made to those activities by realigning budgets within the project (i.e. spend less funds on procurements/service pools, etc. and spend more funds on travel as required). However, due to system complications, the budget plans must be coordinated and changed through the OCFO.

IX. Questions & Answers

What is full cost?

Full cost is the practice of aligning all costs, including civil service personnel costs and other institutional costs to major activities (referred to as projects at NASA.)

What is the purpose of full cost?

The purpose of full cost is to enhance cost-effective mission performance by modifying NASA business practices so that managers have better financial information to support the decision-making process.

How will full cost practices benefit the Agency/Center?

The full cost initiative assigns all costs with programs/projects enabling managers to have better information to support better decision-making.

When will the full cost initiative be implemented at LaRC?

The full cost initiative was implemented at the beginning of FY 2004 (October 2003).

How will costs be categorized under the full cost approach?

Costs are grouped into six basic categories: ¹procurements, ²civil service personnel, ³travel, ⁴service pools, ⁵Center G&A, and ⁶Corporate G&A.

What is a cost pool?

A cost pool is an accumulation of similar costs and cost types that are distributed to projects by an assignment or allocation methodology that best links the costs with the customer's served/supported. Cost pools will be used in the new IFM system for service activities and G&A costs.

What are Center services?

Center services are activities that the Center provides to support employees and programs/projects. Services include all Center provided activities required to maintain the Center and meet mission objectives and milestones. Center services include activities such as facility services, information technology services, fabrication services, test services, science and engineering services, and wind tunnel services.

Who receives these services?

Center employees, on-site contractors, Center programs/projects, and visitors receive a variety of basic Center services, such as facility service and information technology services. Certain program/project customers also receive other more specialized services such as wind tunnel services.

Who manages the services?

Each service is managed by a Center civil servant who oversees the operations, costs and bills of the service operations.

Who pays for the services?

Customers or users of the services pay the costs of the services. These users may include programs, projects, organizations, as well as external customers.

How do customers pay for services?

Programs pay for services based on estimated use of services identified during the budget process. Each service provides a specific unit of consumption. The Center typically updates estimated service information with actual service use during the operating year and in related service cost distributions.

When are customers billed for services?

Customers are alerted to the anticipated bills for services based on customer requirements during the annual budget formulation process. The actual bills are distributed prior to the beginning of the fiscal year and typically updated during the year for major changes between estimated and actual use.

Are service bills ever updated for requirement changes?

Yes. Service bills are typically updated prior to the beginning of the fiscal year and mid-year to accommodate changes in planned versus actual service usage.

Why do the services cost so much?

LaRC is a world-class high technology Research and Development (R&D) Center with unique capabilities. The costs of Center services are commensurate with LaRC's mission requirements.

Who determines the scope, size and costs of Center services?

Customers, service providers and Center management, determine the scope, size, content and cost of the services. Customers determine their required usage or consumption. Service providers recommend the capacity, costs and rates based on projected and historical consumption. Center management approves the final costs, rates, and overall scope of Center services.

Why can't programs and projects obtain required services somewhere else?

The Center must provide certain basic services to remain a premier R&D organization and to achieve Agency missions. Programs are required to obtain certain services through the Center rather than elsewhere to achieve Agency, Center and program security, safety, quality and economic imperatives.

X. Sources of Additional Information and References

Additional information can be found at:

NASA Full Cost website: <https://fullcost.hq.nasa.gov/>

LaRC Full Cost website: <http://fullcost.larc.nasa.gov/index.cfm>

References/sources of information:

Full Cost Initiative Agencywide Implementation Guide, February 1999

Langley Office of the Chief Financial Officer

Langley Full Cost Implementation Team

IFMP website

Agency Full Cost Team